## A NEW ELYMUS FROM ALASKA1

## H. J. Hodgson<sup>2</sup>

A question concerning the identity of a species of *Elymus* considered in other studies arose during the winter of 1954. At that time herbarium specimens of representative material collected in the Matanuska Valley were examined independently by Jason R. Swallen of the Smithsonian Institution, J. L. Stebbins, Jr. of the University of California, D. C. Smith and E. L. Nielsen of the Wisconsin Agricultural Experiment Station and R. W. Pohl of the Iowa Agricultural Experiment Station. All questioned the relegation of this material to *E. canadensis* L. as had been done by Anderson<sup>3</sup> and Lepage.<sup>4</sup> Certain features suggested the species indicated, but all agreed that it did not appear to be closely similar to *E. canadensis* with which they were familiar. The following quotation, taken from Mr. Swallen's letter regarding the herbarium specimens in question, is relatively typical of those received:

. . . I am not satisfied with calling it *Elymus canadensis*, and on the other hand there is no other species in Alaska or North America that it could be. There is some resemblance to *E. hirsutus*, but none of the lemmas are hirsute toward the summit as in this species. It would seem, then, that this is either a hybrid in itself or a new species.

Subsequently, Nielsen has had opportunity to examine numerous colonies of the plant in question as it occurs naturally in Alaska. It was his opinion that this appeared quite different from any *Elymus canadensis* he was familiar with in the States.

The following description has been drawn to cover the plant for which the name *Elymus pendulosus* is proposed, calling attention to the distinctive pendulose aspect of the spikes.

## Elymus pendulosus Hodgson, sp. nov.

Planta perennis, caespitosa, rhizomatibus brevibus adscendentibus, viridis vel purpurea; culmi erecti vel basi decumbentes, 40–100 cm.

<sup>&</sup>lt;sup>1</sup> Contribution from Agronomy Department, Alaska Agricultural Experiment Station, Published with approval of the Director.

<sup>&</sup>lt;sup>2</sup> Formerly Head, Agronomy Department, Alaska Agricultural Experiment Station.

<sup>&</sup>lt;sup>3</sup> Iowa State College Jour. of Science 18:381-445. 1944

<sup>4</sup> Nat. Canad. 79:241-266. 1952